

BIOETHICS

Just Genes: The Ethics of Genetic Technologies. By Carol Isaacson Barash. 2008. Praeger Publishers. (ISBN 9780313349003). 288 pp. Hardcover. \$49.95.

When I first saw this book, I scrambled to grab it up. When I teach the unit on applied genetics, I have my students do a project on bioethics where they must debate current issues such as genetically modified foods, stem cell research, and cloning among others. This seemed like a great resource for the project—one that would enlighten me to some of the more current research on these topics. Barash is thorough in the presentation of the topics included. In the end, her book provided much insight on these issues that are becoming more prevalent in the age of the human genome.

You have to be sharp though as you wrap your head around the text—there are lots of references to past cases and reference sources that are relevant to the chapter topics. The author provides a Notes section at the end of most of the chapters which helps one digest the information. There was more than one occasion where I needed a dictionary to look up one of the terms she used in the text; this is one of the main reasons that this book may be too advanced for most high school aged students if one were using this as a reference source.

As I was reading through the book, I really felt challenged by some of her ideas. Even now—a few weeks after having completed the book—I am really trying to figure out my stand on some of the Barash discussed; for example, in the genetically modified foods section, she asks, “Do we have an obligation to ensure that all humans have access

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to food?” This book is by no means nightstand reading—it demands a lot of thought and attention.

One quote that really struck me was used to describe cloning- but really applies to all of the issues in the book: “Cloning raises several issues, like the other issues discussed in this book, that demonstrate the need for an informed global public. We must educate ourselves and others about genetic technologies, rationally define and discuss the ethical-moral issues that are entailed, and develop the analytical skills to assess for ourselves, for our communities, and our societies the best way to proceed.”

I really felt that this was the dominant theme of Barash’s book. These issues aren’t going away—and each day they affect us more in ways many don’t understand. One is not going to gain knowledge an article tucked away in the third or fourth page of a newspaper. These types of concerns are being debated daily in our schools, churches and synagogues, and in courtrooms. They affect us now and will continue to do so for some time to come. I can’t necessarily recommend this book as a resource for students doing research projects as I think they would be overwhelmed. However, any biology teacher would be doing a great service by using the knowledge in this book and translating it to their students in ways they can understand.

When we delve into these issues, the students really become engaged in the subject matter. I don’t hear the types of questions about how they’d use this stuff in the real world. Instead, I get kids asking questions I don’t know answers to because some of the ramifications are too out of the spectrum of our current realities. Barash references the movie GATTACA which is considered a science fiction movie. Yet, when you look at the laws that are being rushed into place to prevent genetic discrimination and you read in the book about court cases that relate to this very issue, the fiction part doesn’t seem to fit. Therefore, I heartily believe this book should be in the hands of lawmakers, doctors, lawyers, and educators. Regardless of whether we obtain our information from minor news articles or from enlightened sources like this book, these issues are impacting

us now and for the foreseeable future. Being inattentive or ignorant to these topics will do more damage than good—so grab a dictionary and **Just Genes: The Ethics of Genetic Technologies** and learn!



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CHILDREN’S BOOKS

Across the Wide Ocean: The Why, How, and Where of Navigation for Humans and Animals at Sea. By Karen Romano Young. 2007. Greenwillow Books (ISBN 9780060090869). 80 pp. Hardcover. \$18.99.

Across the Wide Ocean is an ambitious and wide-reaching book (world-wide reaching!) for 9 – 12 year old readers. For all its relatively limited length, the book has a wide scope, addressing the multitude of topics central to the understanding of both human and animal migration. Six “migrators” are introduced in the book’s first pages (a sea turtle, a sailboat, a right whale, a submarine, a shark, and a container ship), and then revisited throughout the book as they progress along their migration. In between are pages addressing aspects of migration and navigation such as genetics, true navigation, magnetic force and the compass, celestial navigation, underwater sounds, gyroscopes, vertical navigation (exploration by submersibles), ocean zonation, flotsam and jetsam drifting patterns, currents, and weather.

The book is full of fascinating facts about oceans, ocean organisms and ocean travel. The shark section, for example, contains some very interesting maps of blue shark tag recaptures, a discussion of their habits, habitats and behavior, and their significant adaptations in terms of sensation and migration (such that sharks are so sensitive to electrical fields that they could “detect the heartbeat of a fish hidden in a water-filled box buried in the sand”). Colorful and lively visuals lead to a cheerful exploratory tone to the book,